

Cleaning and disinfecting considerations

This guide synthesizes CDC resources on how to clean and disinfect public spaces. SARS-CoV-2 is generally understood to spread primarily through virus-containing water droplets expelled from infected persons, and less frequently through breathing in aerosolized virus or touching objects that are contaminated with virus-containing droplets. However, in addition to social distancing, practicing prevention hygiene, and following [public health guidelines](#), reducing the risk of exposure to COVID-19 by cleaning and disinfecting can be an important part of reopening your facility.

Coronaviruses on surfaces and objects can die naturally within hours to days. View the [REALM test results](#) for information on how long the virus lasts on different materials. Warmer temperatures and exposure to sunlight can reduce the time the virus survives on surfaces and objects. Find out more in the [REALM literature review](#).

A NOTE ON CARING FOR YOUR COLLECTIONS

Collections and heritage materials require more specialized care than public space fixtures and furnishings. Please see the REALM website for resources on [materials handling](#) and [quarantine, disinfection, and cleaning of museum collections](#).

I. USING CLEANING PRODUCTS AND DISINFECTANTS

The EPA has compiled a [list of disinfectant products](#) that can be used against COVID-19, including ready-to-use sprays, concentrates, and wipes. When using cleaning products and disinfectants:

- Read and follow the directions on the label to ensure safe and effective use.
- Wear skin protection and consider eye protection for potential splash hazards.
- Ensure adequate ventilation.
- Use no more than the amount recommended on the label.
- Consider having an alternative disinfectant on hand if your first choice is in short supply.
- Use water at room temperature for dilution (unless stated otherwise on the label).
- Avoid mixing chemical products.
- Label diluted cleaning solutions.

(Using cleaning products and disinfectants, cont.)

- Store and use disinfectants in a responsible and appropriate manner according to the label.
- Ensure staff are trained on appropriate use of cleaning and disinfection chemicals.
- Make sure there is a sufficient supply of gloves and appropriate personal protective equipment (PPE) based on the amount of product you will need to apply and the size of the surface.
- For more information on concerns related to staff and cleaning, visit the Occupational Safety and Health Administration’s website on [Control and Prevention](#).
- Review the [EPA’s 6 steps for Safe and Effective Disinfectant Use](#).

II. DETERMINING WHAT NEEDS TO BE CLEANED VS. DISINFECTED

Disinfecting with a product listed on the [CDC’s List N: Disinfectants for use against SARs-CoV-2](#) kills germs on the surface. Disinfecting or killing germs on a surface after cleaning can further lower the risk of spreading infection.

What to clean:

- Surfaces and objects that people rarely touch with their hands (like walls and floors) can be cleaned with soap and water and may not need to be disinfected.

What to disinfect:

- Frequently touched surfaces and objects using a product from the [EPA’s list of approved products](#) that are effective against COVID-19 can be disinfected. Examples of frequently touched surfaces and objects that could use routine disinfection following reopening are:

- | | |
|------------------|------------------------|
| • Tables | • Keyboards |
| • Doorknobs | • Toilets |
| • Handrails | • Faucets and sinks |
| • Light switches | • Touch screens |
| • Countertops | • Kiosks |
| • Handles | • ATM machines |
| • Desks | • Exhibit interactives |
| • Phones | • Graphics rails |



- Disinfect items used by children, especially any items that children might put in their mouths (such as toys).

(What to disinfect, cont.)

- Consider designating a “*for disinfection*” space to contain items after a child has used them.
- Consider removing children’s items that cannot be disinfected.
- Familiarize yourself with information on cleaning and disinfecting toys and other surfaces in the [CDC’s Guidance for Childcare Programs that Remain Open](#).

III. CLEANING AND DISINFECTING FABRIC

Fabric is soft and porous and generally not as easy to disinfect as hard and nonporous surfaces. View the EPA’s [Advanced Search Page: Disinfectants for Coronavirus](#) and select “porous” in the “surface type” option.

- Clean or launder soft and porous materials that are not frequently touched, following the directions on the item’s label and using the warmest appropriate water setting.
- If your facility includes dress-up clothes, consider removing these and other soft material items from public use if frequent laundering is not an option.

IV. CLEANING AND DISINFECTING ELECTRONICS



For electronics, such as tablets, touch screens, keyboards, remote controls, and ATM machines:

- Consider putting a wipeable cover on electronics.
- Follow the manufacturer’s instructions for cleaning and disinfecting. If there is no guidance, the CDC recommends using alcohol-based wipes or sprays containing 70% isopropyl alcohol.
- Review the CDC’s “[Cleaning and Disinfecting Your Facility](#)” guide.

V. VACUUMING

The risk of spreading COVID-19 during vacuuming is unknown. Remove area rugs completely to reduce the need for vacuuming. Below are some considerations if you are vacuuming:

- Open outside doors and windows and use ventilating fans to increase air circulation in the area. Wait as long as possible after opening doors and windows before cleaning and disinfecting.
- Use a vacuum equipped with a high-efficiency particulate air (HEPA) filter, if available.

(Vacuuming, cont.)

- Do not vacuum a room or space that has people in it. Wait until the room or space is empty to vacuum, such as at night, for common spaces, or during the day for private rooms.
- Do not deactivate central heating, ventilation, and air conditioning (HVAC) systems; temporarily turn off in-room, window-mounted, or wall-mounted recirculation HVAC to avoid contamination of the HVAC units. These systems tend to provide better filtration capabilities and introduce outdoor air into the areas that they serve.

VI. OUTDOOR SPACES

Outdoor areas generally require normal routine cleaning, not disinfection. High-touch surfaces made of plastic or metal, such as grab bars and railings, should be cleaned routinely. The CDC advises that disinfecting outdoor play areas is not an efficient use of supplies. Cleaning and disinfection of sidewalks and roads, wooden surfaces (play structures, benches, tables) or groundcovers (mulch, sand) is also not recommended.

VII. ALTERNATIVE DISINFECTING METHODS

The efficacy of alternative disinfection methods, such as ultrasonic waves, high-intensity UV radiation, and LED blue light against the COVID-19 virus, is unknown. The CDC is producing guidance on use of germicidal ultraviolet as an alternative disinfection method, but as of 12/29/2020, the EPA cannot confirm whether, or under what circumstances, such products might be effective against the spread of COVID-19.

RESOURCES

www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html
www.cdc.gov/flu/swineflu/variant/h3n2v-publichealth.htm
www.oclib.org/realm/research.html
www.epa.gov/pesticide-registration/list-n-disinfectants-coronavirus-covid-19
www.osha.gov/coronavirus/control-prevention
www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/guidance-for-childcare.html
www.epa.gov/pesticide-registration/list-n-advanced-search-page-disinfectants-coronavirus-covid-19
www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html



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